

# **Highway and Transportation Employees' and Highway Patrol Retirement System**

**Norm Robinson**  
**Executive Director**



**Comprehensive Annual  
Financial Report**

***Fiscal Year Ended  
June 30, 1998***



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**Norm Robinson**  
Executive Director

The goal of the Highway and Transportation Employees' and Highway Patrol Retirement System staff is to provide quality customer service to its members. The interests of the taxpayers of the state of Missouri are safeguarded by the staff's ongoing review of retirement policies, procedures, investments, and legislation--all in an effort to improve the day-to-day business of the system.



**Sheri Tippet**  
Executive Secretary



**Emily Lane**  
Retirement Clerk



**Mary Jordan**  
Senior Secretary

# Highway and Transportation Employees' and Highway Patrol Retirement System

Norm Robinson  
Executive Director

January 8, 1999

Board of Trustees Highway and Transportation  
Employees' and Highway Patrol Retirement System  
Jefferson City, Missouri

This Comprehensive Annual Financial Report of the Highway and Transportation Employees' and Highway Patrol Retirement System for the fiscal year ended June 30, 1998, has been prepared to enhance knowledge and understanding of the retirement system. The material has been prepared in a manner to be useful and informative to the members, to the management of the Department of Transportation and Highway Patrol, and to the elected officials of the state of Missouri.

Management of the retirement system is responsible for the accuracy and completeness of the information in this report. To the best of our knowledge and belief, the information presented is accurate in all material respects and is reported in a manner designed to fairly present the financial position of the fund.

This report contains four sections: Introductory, Financial, Actuarial, and Statistical. For an explanation of the plan and a summary of the Fiscal Year 1998 financial information, review the Introductory Section. An in-depth explanation of the financial position of the plan, as well as the auditor's opinion of the system's financial records, is found in the Financial Section. The actuary certifies the recommended contribution rates and presents the assumptions used to arrive at those rates in the Actuarial Section. The Statistical Section will answer questions about the system's membership.

## BACKGROUND INFORMATION

The Highway and Transportation Employees' and Highway Patrol Retirement System was established by state statute in 1955. Under that legislation, employees of the Department of Transportation and Highway Patrol became members of the retirement system on September 1, 1955. The system initially provided only regular retirement and disability benefits and required the employees to share in the cost of the plan.

While the participating employers in the system, the Department of Transportation and the Highway Patrol, have remained the same since 1955, the plan provisions have changed many times. Today, at no cost to the employees, the system offers not only enhanced retirement and disability benefits, but also benefits for survivors of active and retired members, benefits for qualified terminated vested members, and death benefits.

## FINANCIAL INFORMATION

### Accounting System

This report has been prepared in accordance with generally accepted accounting principles for governmental accounting and reporting. Assets, liabilities, revenues, and expenses are reported on the accrual basis. Internal controls have been established by management to reasonably protect the assets from loss, theft, or misuse.

### Revenues

Two sources of revenue are used to finance retirement, survivor, and long-term disability benefits: employer contributions and income on investments. During Fiscal Year 1998, revenues from those two sources totaled \$240,867,143. Of that amount, \$78,303,693 was contributed to the system by the Department of Transportation and the Highway Patrol and \$162,563,450 was income earned on investments.

### **Expenses**

Expenses of the system totaled \$81,429,869 in Fiscal Year 1998. Benefit payments represent the major expense of the retirement system. Expenses incurred to administer the plan include personal services provided by the staff and professional services for (1) investing the system's funds, (2) monitoring the system's investment guidelines, (3) providing actuarial information, and (4) auditing.

During Fiscal Year 1998, benefit payments totaled \$78,994,438. Administrative expenses during this period were \$2,435,431. During fiscal year 1998, revenue from employer contributions and investments exceeded expenses by \$159,437,274.

### **INVESTMENTS**

The state statutes allow the system to make investments using the same care, skill, and diligence that a prudent person acting in a similar capacity would use. In keeping with this prudent person rule, the Board of Trustees has established investment guidelines. The system's investment managers, UMB Investment Advisors and Rothschild Asset Management, are allowed full discretion in investment decisions within the confines of those guidelines and the statutory investment authority.

The balanced stock and bond portfolio provided a 14.07% time-weighted rate of return for the 1998 fiscal year. Over the last ten fiscal years through June 30, 1998, our balanced fund earned a time-weighted rate of 11.36%.

### **FUNDING**

The Board of Trustees certifies to the Department of Transportation and the Highway Patrol the actuarially determined percentages of payroll necessary to meet the system's obligations. Realizing the importance of maintaining a financially sound system, the participating employers have never failed to contribute the amounts certified by the Board of Trustees.

### **REPORT DISTRIBUTION**

This report is being distributed to the Governor, the State Auditor, and the Joint Committee on Public Employee Retirement. It is also being distributed to all Department of Transportation Division and District offices and Highway Patrol General Headquarters and Troop offices. Copies to others will be furnished upon request.

### **ACKNOWLEDGMENTS**

The timely preparation of this report was made possible by the cooperation of the personnel of the retirement system, Department of Transportation, the Highway Patrol, and the auditing and actuarial consultants.

I appreciate the support and leadership of the Board of Trustees and the participating employers, and I commend the staff members for their dedication and service to the members of the system.

Respectfully submitted,



Norm Robinson  
Executive Director

# Board of Trustees

The Highway and Transportation Employees' and Highway Patrol Retirement System is governed by a Board of Trustees. As set out in Section 104.160 of the Revised Statutes of Missouri, the Board is comprised of the following ten members:



**Edward D. Douglas**

Board Chairman  
Chairman, President and CEO of Citizen's  
Bankshares Company in Chillicothe, Missouri  
Highway & Transportation Commissioner  
Term Expires 12-1-2001



**Robert E. Jones**

Board Vice-Chairman  
Chairman and Chief Executive Officer of  
The Jones Company in St. Louis, Missouri  
Highway & Transportation Commissioner  
Term Expires 12-1-1999



**W. L. "Barry" Orscheln**

President of Orscheln Industries,  
headquartered in Moberly, Missouri  
Highway & Transportation Commissioner  
Term Expires 12-1-2003



**Senator Sidney Johnson**

State Senator  
District 34  
Appointed by President  
Pro-Tem of the Senate



**Representative Gracia Backer**

State Representative  
District 20  
Appointed by the  
Speaker of the House



**Colonel Weldon Wilhoit**  
 Superintendent of  
 The State Highway Patrol



**Joe Mickes**  
 Chief Engineer of the  
 Missouri Department of Transportation



**Forrest "Duke" Wrisinger**  
 District Liaison Engineer  
 MoDOT, District 4, Kansas City  
 Elected by MoDOT Employees  
 Term Expires 7-1-1998  
 Re-elected to Term Expiring 7-1-2002



**Major Roger Stottlemire**  
 Director, Field Operations Bureau  
 Missouri State Highway Patrol  
 Elected by Patrol Employees  
 Term Expires 7-1-1998  
 Re-elected to Term Expiring 7-1-2002



**Bill Shaw**  
 Retired as Assistant to the Chief Engineer,  
 Planning and Design, MoDOT, Support Center  
 Elected by Retired Members  
 of the System  
 Term Expires 7-1-1998  
 Re-elected to Term Expiring 7-1-2002

# Highway and Transportation Employees' and Highway Patrol RETIREMENT SYSTEM

Ed Douglas, *Chairman*  
Bob Jones, *Vice Chairman*  
W. L. "Barry" Orscheln, *Member*  
Sen. Sidney Johnson, *Member*

Rep. Gracia Backer, *Member*  
Maj. Roger Stottlemire, *Member*  
Forrest "Duke" Wrisinger, *Member*  
Bill Shaw, *Member*

Joe Mickes, *Member*  
Col. Weldon Wilhoit, *Member*  
Norm Robinson, *Exec. Dir.*  
Rich Tiemeyer, *Counsel*

January 8, 1999

To the Members of the Highway and Transportation  
Employees' and Highway Patrol Retirement System

On behalf of the Board of Trustees, we are pleased to present the Comprehensive Annual Financial Report of the Missouri Highway and Transportation Employees' and Highway Patrol Retirement System for the fiscal year ended June 30, 1998.

During the past year we welcomed Barry Orscheln, William Gladden and Colonel Weldon Wilhoit as new Board members.

We also added an additional investment management firm, Rothschild Asset Management, for investments in small capitalization stocks. The Investment Committee is also actively pursuing adding another investment firm for investments of large capitalization stocks. The goal is to increase our investment earnings while ensuring a broad mix of investments.

The Board, and staff, are dedicated to providing a quality retirement system. We appreciate the input of our members to help maintain a successful system.

Sincerely,



Edward D. Douglas  
Chairman



# Administrative Organization

## PERSONAL SERVICES

The Executive Director of the Highway and Transportation Employees' and Highway Patrol Retirement System has charge of the offices and records of the system and hires such employees deemed necessary, subject to the direction of the Board of Trustees.

The Chief Counsel of the Highway and Transportation Commission furnishes legal services and provides legal opinions of the retirement statutes as necessary for implementation.

Work assignments related to the Retirement System that are performed by Department of Transportation and Highway Patrol personnel are considered duties in connection with their regular employment.

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### Director's Office

Norm Robinson\*  
Executive Director

Sheri Tippet\*  
Executive Secretary

Mary Jordan\*  
Senior Secretary

Emily Lane\*\*  
Retirement Clerk

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### Legal Services

Rich Tiemeyer  
Chief Counsel

Dennis Redel  
Assistant Chief Counsel

Dan Pritchard  
Senior Assistant Counsel

Sharon E. Schulte  
Senior Assistant Counsel

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### Financial

Alfred S. Kaiser\*\*\*  
Business and Benefits  
Manager

Robin McKee\*\*\*  
Intermediate Business  
Specialist

Maxine Johnson\*\*\*  
Account  
Technician

Donna Hoffman\*\*\*  
Account  
Technician

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### Benefits - Department of Transportation

Joyce Wagner\*\*\*  
Senior Benefits  
Specialist

Mary Helen Norfleet\*\*\*  
Senior Benefits  
Specialist

Patti Holzem\*\*\*  
Senior Clerk

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### Benefits - Highway Patrol

Captain Terry W. Moore\*\*\*\*  
Director, Human  
Resources Division

Theresa M. Backes\*\*\*\*  
Special Assistant

Kerry Bax\*\*\*\*  
Personnel Records  
Clerk III

Bev Mauzy\*\*\*\*  
Personnel Records  
Clerk III

- \* Full-time employees of the Highway and Transportation Employees' and Highway Patrol Retirement System.  
\*\* Part-time employee of the Highway and Transportation Employees' and Highway Patrol Retirement System.  
\*\*\* Employees of the Department of Transportation. The Retirement System reimburses the department for time spent by these individuals in performing retirement related duties.  
\*\*\*\* Employees of the Highway Patrol.

## CONSULTANT SERVICES

The following firms are retained by the Board of Trustees to serve in professional capacities or provide consultant services.

**Actuary**  
John Molinar  
Milliman and Robertson Inc.  
St. Louis, Missouri

**Investment Monitor**  
Robert F. Marchesi  
DeMarche Associates  
Kansas City, Missouri

**Investment Manager**  
David Anderson  
UMB Investment Advisors  
Kansas City, Missouri

Radey Johnson  
Rothschild Asset Management  
New York, New York

**Auditor**  
Lynn Graves  
Evers and Company, CPA's  
Jefferson City, Missouri

**Legislative Consultant**  
Jack Pierce  
Jefferson City, Missouri

# Summary of Plan Provisions

## MEMBERSHIP

Membership includes individuals who are full-time, salaried employees, wage employees in a position normally requiring 1,000 hours of work per year, retirees, disability benefit recipients, and terminated employees entitled to a deferred annuity.

## LEAVE OF ABSENCE

A leave of absence for sickness may be granted for a maximum of 24 months and is creditable service toward retirement.

Time spent away from employment while receiving workers' compensation is creditable time in the retirement system.

A leave of absence for military service or training when such service is compulsory or when the United States is actively engaged in war is creditable toward retirement. Leaves of absence for voluntary enlistment in the Armed Forces of the United States during times of peace are granted for a period not to exceed four years. Such service is non-creditable, however, the employee may be credited for four years of this service by contributing to the system.

Leaves of absence may be granted for educational purposes, personal hardship, or other extraordinary reasons. Such time away from employment will not be counted as creditable service toward retirement.

## SURVIVOR BENEFITS

Should an employee die after completing three years of service, the spouse or unemancipated children under age 21, if named as beneficiary, qualify for 25% of the benefit the member would have received had he retired on the date of death. This benefit will be increased 5/12 of 1% for each month of service in excess of five years to a maximum of 50% of the member's base benefit. The employee and spouse must have been married at least two years for the spouse to qualify.

Should a member with ten years or more of service die, the surviving spouse may elect, in lieu of the benefit above, to receive a survivorship calculated as if the member had retired on the date of death and elected the Joint and Full option. This option requires the base benefit to be reduced actuarially based on the difference between the age of the member and the spouse.

Spouses of deceased retirees, who had selected an unreduced option and who retired prior to August 28, 1989, receive a monthly benefit of one-half the amount the retiree was receiving at the time of the retiree's death.

## FULL RETIREMENT BENEFITS

Full retirement benefits for non-uniformed members are available at age 65 with four years of creditable retirement service, 60 years of age with 15 years of creditable retirement service or if the sum of a member's age and years of creditable service equals 80 or more, provided the member is at least 50 years of age (80 and Out Provision). Uniformed members qualify for full retirement at age 55 with four years of service.

Full benefits are computed by multiplying 1.6% (2.13% for uniformed members) of the average monthly pay received during the 36 consecutive months when compensation was greatest, times years and twelfths of a year of creditable retirement service. Unused, accumulated sick leave at the date of retirement is converted to retirement service for the purpose of calculating an annuity.

One month of service is granted for each 21 days of unused, accumulated sick leave if the member works continuously until retirement. Converted sick leave cannot be used to reach the time required for vesting or retirement. Uniformed members receive a special benefit of \$90 per month reduced by any amount earned during gainful employment. This special benefit terminates at age 65. This benefit is not applicable for uniformed members of the patrol hired after January 1, 1995.

Members shall receive credit for all service that had not been considered creditable provided the employee works continually with their agency until retirement.

Retirement benefits may be designated as marital property and courts are allowed to divide the benefits in a dissolution of marriage proceeding. The division of benefit cannot exceed 50% of the benefit accrued during the period of the marriage.

## **PRIOR SERVICE**

The system allows for the transfer or purchase of creditable service of public employees who move from a position covered by one public employee retirement system to another.

The system also allows certain members of the uniformed patrol who had served as police officers for any city to purchase equivalent service for that time not to exceed four years.

## **REDUCED BENEFITS FOR EARLY RETIREMENT**

Members age 55 through 59 who have completed 10 but less than 30 years of creditable retirement service qualify for a reduced benefit.

The benefit is computed using the same formula as for full benefits and then is reduced by 0.6% for each month of service the employee is younger than the full benefit retirement age.

## **MINIMUM BENEFIT**

The total base monthly benefit payable to a member shall not be less than \$15 multiplied by the number of full years of creditable service. Elections to reduce the member's benefit for early retirement or to provide a survivor's benefit will not increase the minimum benefit. Terminated members entitled to a deferred annuity do not qualify for the minimum benefit.

## **RETIREMENT BENEFIT OPTIONS**

Upon applying for retirement benefits, the employee may select one of the following options to provide a survivorship.

**Full Base Benefits or Full Adjusted Base Benefits (Reduced for Early Retirement) with One-Half Spouse Survivorship:** The initial base benefit is unreduced. In the event of death, the spouse is entitled to an amount equal to one-half the retiree's benefit at the time of death.

**Reduced Spouse Option - Joint and Full:** The base benefit, or adjusted base benefit, is reduced based on the difference between the age of the retiree and the spouse. In the event of death, the spouse is entitled to an amount equal to the retiree's benefit at time of death. If the designated spouse dies before the retiree, the retiree's benefit will "pop-up" or revert to a normal annuity at the first of the month following receipt by the Board of written notification of the death accompanied by a certified copy of the death certificate.

**Guaranteed Payments:** The base benefit or adjusted base benefit is reduced to guarantee 60 or 120 payments. In the event of death prior to the elected number of benefit payments, the reduced amount will be paid to the designated beneficiary or to the estate.

In all cases where the benefit is reduced to provide a survivorship, the reduction continues throughout the lifetime of the retiree.

## **DEFERRED BENEFITS**

Employees with five years of service who terminate employment are entitled to deferred benefits when they attain the age qualifying them for normal or reduced benefits.

Should a terminated vested member return to employment, all prior service will be restored and future benefits will be computed on the total creditable service, average compensation, and law in effect at the time of subsequent termination or retirement.

## DISABILITY

There are three categories of disability benefits.

**Long-Term:** A member who is unable to perform his/her present job or any other position in the Department or Patrol and whose disability has been diagnosed as being of such nature as to exist for more than one year, may qualify for long-term disability benefits. (Disabilities resulting from war, declared or undeclared, or any act of war are not covered under this category of disability benefits.) Benefits begin on the 181st day of disability or the day following the day sick leave benefits are exhausted, whichever is later, and continue until age 65 or when the individual qualifies and selects normal retirement benefits. For employees who are disabled after age 60, the benefits continue for a maximum of five years and a minimum of one year according to a schedule approved by the Board. Benefits for long-term disability are equal to 60% of the compensation immediately prior to the disability less primary Social Security benefits and any benefits provided at the cost of the Department or Patrol, including Workers' Compensation indemnity benefits. The minimum long-term disability monthly benefit is 9% of the member's salary immediately prior to becoming disabled, or \$50, whichever is greater. Creditable service in the retirement system will continue to accrue until retirement or until the member qualifies for full retirement benefits, whichever is earlier.

**Normal:** A member who is unable to perform his/her present job or any other position for which the member is suited may qualify for normal disability benefits. These benefits are computed in the same manner as regular retirement benefits. (Average compensation times 1.6% times years of creditable service equals Normal Disability Benefits.)

Should a normal disability recipient return to employment and complete six months of service, all prior service will be restored and future benefits will be computed on the total creditable service, average compensation, and law in effect at the time of subsequent termination or retirement. The time spent on normal disability benefits will not be included in the creditable service restored.

**Work Related:** A member who is injured while

performing the duties of his/her job and who is unable to perform the work performed by the employee on the date preceding the date of disability and who has not regained his/her earning capacity, may qualify for work-related disability benefits. These benefits are equal to 70% of the compensation the employee was receiving at the time of the work-related injury; provided, however, that the benefit amount plus social security disability benefits shall not exceed 90% of the employee's salary.

All disability benefits are reduced by any amount of weekly indemnity benefits paid to the member as a result of Workers' Compensation.

Disability benefits are discontinued if the member regains 50% of his/her earning capacity.

Qualified survivors of long-term disability recipients and work-related disability recipients are entitled to the same benefits as survivors of employees. The surviving spouse of a normal-disability benefit recipient is entitled to an amount equal to one-half the benefit being received at the time of death.

## ANNUAL ADJUSTMENT IN BENEFITS

An annual adjustment in benefits is made effective October 1 of each year for retirees, normal and work related disability recipients, and qualified surviving spouses who received benefits the preceding month.

Under House Bill 356, effective August 28, 1997, retirees and survivors, and current employees (after retirement) will continue to receive annual COLAs (Cost-of-Living Adjustments) on their monthly benefit until the cumulative COLAs equal the 65% COLA cap. The annual COLAs (prior to reaching the 65% cap) will continue to be equal to 80% of the change in the Consumer Price Index (CPI) with a minimum of 4% and a maximum of 5%.

After the 65% cap is reached, retirees, survivors, and current employees (after retirement) will continue to receive annual COLA increases equal to 80% of the change in the CPI, with a maximum of 5%.

For employees hired after the effective date of the legislation there is no guarantee of a 4% minimum

annual increase nor is there a 65% COLA cap. The annual retirement COLA will be equal to 80% of the change in the CPI, not to exceed 5%.

#### **DEATH BENEFIT**

The Retirement System provides a death benefit of \$5,000 for beneficiaries of members who retired or elected normal or work-related disability benefits after September 28, 1985. Survivors of terminated vested members who subsequently retire and survivors of

members receiving long term disability benefits do not qualify for this benefit.

#### **BENEFITS EXEMPT FROM GARNISHMENT**

Retirement or disability benefits are not subject to execution, garnishment, attachment, writ of sequestration or any other process or claim, and are unassignable, except when the benefit is considered marital property and divided by a court in a dissolution of marriage proceeding.

# Legislative Changes

During the 1998 Legislative session, no major Legislative changes were made in our retirement system.

# Legal Services



**Rich Tiemeyer**  
Chief Counsel



**Dennis Redel**  
Assistant Chief Counsel  
Administration



**Dan Pritchard**  
Senior Assistant Counsel



**Sharon E. Schulte**  
Senior Assistant Counsel

Chief Counsel Rich Tiemeyer heads up the team handling legal matters affecting the Retirement System. The team reviews changes in retirement law and questions of interpretation affecting policy and procedure.



# Evers & Company, CPA's

Certified Public Accountants and Consultants

Elmer L. Evers  
Jerome L. Kauffman  
Richard E. Elliott  
Dale A. Siebeneck  
Keith L. Taylor  
Lynn J. Graves

To the Board of Trustees of the  
Missouri Highway and Transportation  
Employees' and Highway Patrol  
Retirement System  
Jefferson City, Missouri:

We have audited the accompanying statements of plan net assets of the Missouri Highway and Transportation Employees' and Highway Patrol Retirement System (the Retirement System) as of and for the years ended June 30, 1998, and 1997, and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of the Missouri Highway and Transportation Employees' and Highway Patrol Retirement System as of June 30, 1998, and 1997, and the results of its changes in its financial status for the years then ended in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedules of funding progress and employer contributions are supplementary disclosures under Governmental Accounting Standards Board Statement Number 25, and are not a required part of the financial statements. The supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements of the Retirement System. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly presented in all material respects in relation to the basic financial statements taken as a whole.

*Evers & Company, CPA's, L.L.C.*

EVERS & COMPANY, CPA's, L.L.C.  
Jefferson City, Missouri  
November 17, 1998



# Statement of Plan Net Assets

JUNE 30, 1998, AND 1997

	<u>1998</u>	<u>1997</u>
<b>ASSETS:</b>		
Cash	\$ 1,153,966	34,347
Receivables		
Contributions	829,904	2,136,335
Accrued interest and dividends	9,077,204	8,997,572
Investment sales	<u>729,316</u>	<u>1,694,944</u>
Total Receivables	10,636,424	12,828,851
Investments, at fair value (Note 2)		
Common & preferred stocks	756,491,269	592,591,011
Government and government agency securities	237,619,202	218,394,928
Corporate bonds	190,340,245	177,807,375
Missouri small business funds	--	720,010
Short term investments	<u>124,579,397</u>	<u>157,970,125</u>
Total Investments	1,309,030,113	1,147,483,449
Prepaid expenses	--	343
Fixed Assets, net of depreciation	<u>40,006</u>	<u>38,914</u>
<b>TOTAL ASSETS</b>	<b>1,320,860,509</b>	<b>1,160,385,904</b>
<b>LIABILITIES:</b>		
Accounts payable	468,222	332,869
Investment purchases	<u>978,705</u>	<u>77,539</u>
<b>TOTAL LIABILITIES</b>	<b>1,446,927</b>	<b>410,408</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<b><u>\$ 1,319,413,583</u></b>	<b><u>1,159,975,496</u></b>

(A schedule of funding progress is presented in the Supplemental Information.) See accompanying notes to financial statements.

# Statement of Changes in Plan Net Assets

JUNE 30, 1998, AND 1997

	<u>1998</u>	<u>1997</u>
<b>ADDITIONS:</b>		
Contributions	\$ 78,303,693	\$ 76,872,019
Investment income		
Net appreciation (gains/losses and changes in market value)	50,772,701	103,568,646
Interest and dividends	111,702,508	47,423,721
Securities lending gross income (net)	<u>80,272</u>	<u>50,402</u>
Total Investment Income	162,555,481	151,042,769
Less Investment Management Fees	<u>1,803,777</u>	<u>1,370,612</u>
Net Investment Income	<u>160,751,704</u>	<u>149,672,157</u>
Other Income		
Miscellaneous income	<u>7,969</u>	<u>203,282</u>
Total Additions	239,063,366	226,747,458
<b>DEDUCTIONS:</b>		
Monthly benefits	78,994,438	72,116,837
Administrative expenses	<u>630,841</u>	<u>491,677</u>
Total Deductions	79,625,279	72,608,514
<b>NET INCREASE:</b>	159,438,087	154,138,944
Net Assets Held in Trust for Pension Benefits		
Beginning of Year	<u>1,159,975,496</u>	<u>1,005,836,552</u>
End of Year	<u>\$ 1,319,413,583</u>	<u>\$ 1,159,975,496</u>

*See accompanying notes to financial statements.*

## Financial Section

Highway & Transportation Employees'  
and Highway Patrol Retirement System

# Notes to Financial Statements

FOR THE YEARS ENDED JUNE 30, 1998, AND 1997

## 1. DESCRIPTION OF THE RETIREMENT SYSTEM:

### General

The Missouri Highway and Transportation Employees' and Highway Patrol Retirement System (the Retirement System) was established by, and is administered by, a Board of Trustees in accordance with the Revised Statutes of Missouri (RSMo). The Retirement System is a single-employer public employee retirement system which provides retirement, death, and disability benefits to full-time (defined as anticipating at least 1,000 hours to be worked annually) employees of the Missouri Highway and Transportation Commission and the Missouri State Highway Patrol. Due to the nature of the Retirement System, reliance on the funding from the State of Missouri and the overall control of policies by state officials, the Retirement System is considered a part of the State of Missouri financial reporting entity. The Retirement System is not subject to the provisions of the Employee Retirement Income Security Act of 1974.

The System had two contributing employers in 1998, and 1997.

Membership in the Retirement System at June 30, 1998 and 1997 consisted of the following:

	<u>1998</u>	<u>1997</u>
Retirees and beneficiaries		
currently receiving benefits	5,134	4,931
Disability recipients	196	201
Long-term disability recipients	79	71
Vested terminated employees	660	574
Active with vested benefits	6,295	6,302
Active without vested benefits	<u>2,554</u>	<u>2,695</u>
Total	<u>14,918</u>	<u>14,774</u>

### Benefits

Benefits in the Retirement System currently vest after five years of creditable service. For members retiring prior to August 28, 1994, normal retirement age is 65 with four years of creditable service (55 for members of the uniformed patrol), with the retirement annuity based on a formula which considers average final compensation and number of years of creditable service. Nonuniformed employees were eligible for an unreduced annuity at age 65 with four years of creditable service, or age 60 with fifteen years of creditable service, or age 55 with thirty years of creditable service. Nonuniformed employees could retire with a reduced annuity between the ages of 55 and 59 with at least ten years and less than thirty years of creditable service. Uniformed employees were eligible for an unreduced annuity at age 55 with four years of creditable service. Uniformed employees were eligible for an unreduced annuity at age 55 with four years of creditable service. See "Amendments to the Retirement System" below for changes made in normal retirement age and other benefit changes effective August 18, 1994, or January 1, 1995.

State statutes provide for special consultant fees to be paid to certain retirees along with the normal retirement benefits. These retirees have been appointed by the Board of Trustees to serve as consultants on the problems of retirement, aging, and other State matters. For such services provided, special consultant fees are paid monthly in amounts equal to the incremental increases in retirement benefits that would have been received had those persons benefited from changes in the law that affected increases in the retirement formula enacted since their retirement. Benefit provisions are established by State statute and may be amended only by action of the Missouri state legislature.

The Retirement System also provides survivor, disability, and lump-sum death benefits. Survivor benefits are payable to a surviving spouse or minor children of active employees who die after earning three years of creditable service. The annuity paid to the survivor is based on a percentage of the accrued benefit at the time of death. All disability benefits are offset by any workers' compensation benefits. Duty-related disability benefits are 50% (70% effective August 28, 1995) of salary at the time of disability. Non-duty-related disability benefits are based on the accrued annuity

at the date of disability. Long-term disability benefits are 60% of salary immediately prior to the disability, less any Social Security benefit. Those who retire from active employment subsequent to September 28, 1985, with an immediate pension are provided a \$5,000 lump-sum death benefit to be paid to a designated beneficiary.

### **Contributions**

Contributions to the Retirement System are made by the State of Missouri. Employees do not contribute to the Retirement System. The Retirement System's funding policy provides for actuarially determined employer contributions using the entry-age normal cost method on a closed group basis (consisting of normal cost and amortization of any unfunded accrued liabilities over a 40-year period). Actuarially determined rates, expressed as percentages of annual covered payroll, provide for amounts sufficient to fund those benefits designated by State statute to be funded in advance. Actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation as discussed in Note 3. Contributions for the special consultant fees are being funded on an actuarial basis.

Contributions totaling \$78,303,693 and \$76,872,019 for fiscal years 1998 and 1997, respectively, represent funding of normal costs and amortization of the unfunded accrued liability. Contribution rates determined by the Retirement System's actuary for the years ended June 30, 1998, and 1997 are as follows:

	<u>1998</u>		<u>1997</u>	
	<u>Non-uniformed</u>	<u>Uniformed</u>	<u>Non-uniformed</u>	<u>Uniformed</u>
Normal cost	11.46	16.03	10.64	15.22
Amortization of unfunded accrued liability	<u>11.14</u>	<u>15.73</u>	<u>15.48</u>	<u>22.59</u>
Total contribution rate	<u>22.60%</u>	<u>31.76%</u>	<u>26.12%</u>	<u>37.81%</u>

### **Amendments to the Retirement System**

Benefits of the Retirement System, as discussed above, were effected by House Bill 1149 (HB 1149) which was approved and made effective, for most provisions, August 28, 1994, with the remainder effective January 1, 1995. The Bill provides for the following changes:

- \* Normal Retirement--members 50 or older are entitled to retire with a normal annuity and elect any of the survivor benefits if the sum of their age and service totals 80 or more. This provision was effective August 28, 1994.
- \* Increase In Formula Multiplier--the multiplier utilized in the retirement benefit formula increased from 1.5% to 1.6% effective January 1, 1995. This increase is also retroactive to individuals whose retirement date is before January 1, 1995.
- \* Survivor's Cost of Living Adjustment (COLA)--beneficiaries receiving benefits qualify for the annual minimum 4% to a maximum 5% COLA. Those beneficiaries now receiving a benefit are limited to 65% of the benefit they are receiving in total COLAs. Those who begin receiving COLAs after the effective date are limited to 65% of their initial benefit.
- \* Pop-Up Provision--retired members and future retirees whose spouse precedes them in death who have chosen a spouse option that reduced their initial retirement benefit will have their monthly benefit adjusted to the amount they would be receiving if they had not chosen the option. This provision was effective August 28, 1994.
- \* Minimum Benefit--effective January 1, 1995, the minimum benefit increased to \$15 from the prior level of \$12. As a result, a member's normal annuity amount cannot be less than the total years of service multiplied by \$15.
- \* Purchase of service for uniformed patrol--effective August 28, 1994, uniformed patrol members who previously served in the police force of any city will be allowed to purchase creditable service time of up to four years maximum.

## **2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

### **Basis of Accounting**

The financial statements were prepared using the accrual basis of accounting. Plan member contributions are recognized as revenues in the period in which employee services are performed. Expenses are recorded when the corresponding obligations are incurred.

### **Method Used to Value Investments**

Investments are reported at fair value on a trade date basis. Short-term investments are reported at cost, which approximates fair value. Bonds and stocks traded on a national or international exchange are valued at the reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Investments that do not have an established market are reported at estimated fair value.

Dividend income is recognized when dividends are declared. Interest income is recognized when earned.

	<b><u>1998</u></b>		<b><u>1997</u></b>	
	<b><u>Carrying Amount</u></b>	<b><u>Market Amount</u></b>	<b><u>Carrying Amount</u></b>	<b><u>Market Amount</u></b>
Government and government agency securities	\$ 231,926,912	\$ 237,619,202	\$ 217,094,036	\$ 218,394,928
Corporate bonds	187,205,792	190,340,245	178,541,337	177,807,375
Common and preferred stocks	527,928,286	756,491,269	441,587,728	592,591,011
Missouri small business funds	--	--	902,509	720,010
Short-term investments	<u>124,054,670</u>	<u>124,579,397</u>	<u>156,878,048</u>	<u>157,970,125</u>
Total investments	<u>\$1,071,115,660</u>	<u>\$1,309,030,113</u>	<u>\$ 995,003,658</u>	<u>\$1,147,483,449</u>

### **Investments**

As of June 30, 1998, and 1997, the Retirement System had cash with a book balance of \$1,153,966 and \$34,347, respectively, and a bank balance of \$2,545,377 and \$1,437,829, respectively. The bank in which this cash is held is required to pledge securities sufficient to collateralize these accounts. As of June 30, 1998, and 1997, the market value of this collateral was \$4,492,300 and \$3,015,440, respectively.

### **Categories of Asset Risks**

The investments of the Retirement System are governed primarily by an investment authority known as the "prudent person rule." The prudent person rule, as set forth by State statute, establishes a standard for all fiduciaries, which includes anyone that has authority with respect to the fund. The Retirement System's investments are categorized to give an indication of the level of risk assumed by the fund at year-end. Category 1 includes investments that are insured or registered or for which the securities are held by the Retirement System or its agent in the Retirement System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the Retirement System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty, or by its trust department but not in the Retirement System's name. As of June 30, 1998, and 1997, all investments of the Retirement System, except real estate mortgages, are classified in Category 3. Real estate investments are not considered securities and, as such, are not categorized for credit risk.

### **Related-Party Transactions**

The Retirement System reimburses the Missouri Highway and Transportation Commission for accounting, management, legal, data processing services, office space, and utilities. This amounted to \$311,267.61 for June 30, 1998, and \$230,451.30 for June 30, 1997.

### **Office Equipment and Fixtures**

The office equipment and fixtures which are presented at cost, are depreciated on the straight-line method over the estimated useful lives of the related assets. The estimated useful lives are as follows: furniture - 10 years, and equipment - 5 years.

### **Receivables**

Receivables consist primarily of contributions owed and yet to be remitted by the employer, pending investment trades and interest and dividends.

### **Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **3. CONCENTRATIONS:**

No investments in any one organization (other than those issued by the U.S. Government) represent five percent of plan net assets.

### **4. COMPENSATED DEFERRED ABSENCES:**

Expenses for accumulated annual leave earned by employees are recorded when earned by the employee. The balance owed was \$15,469.43 and \$13,287.04 as of June 30, 1998, and 1997, respectively.

### **5. RETIREMENT PLAN:**

The Retirement System employs four people. All four employees are covered by the Retirement System. Amounts credited to the System on their behalf were \$32,821.50 and \$24,198.72 for the years ended June 30, 1998, and 1997, respectively.

### **6. DEFERRED COMPENSATION:**

The employees of the Retirement System may participate in a deferred compensation plan created in accordance with Internal Revenue Code Section 457. This plan, available to all employees of the Board of Trustees, permits the deferral of a portion of their salary until future years. The deferred compensation is not available to the employees until termination, retirement, death or an unforeseeable emergency. All compensation deferred under the plan is solely the property of the Retirement System. Participants' rights under the plan are equal to those of general creditors.

The plan assets are invested as directed by the plan participants in a variety of fixed and variable annuity options offered by Nationwide Life and Prudential.

### **7. OTHER INCOME:**

During the current fiscal year the System was the recipient of income from a class action settlement. The total Other Income for the fiscal years ended June 30, 1998, and 1997, was \$7,969 and \$203,282, respectively.

### **8. SECURITIES LENDING PROGRAM:**

Under the "prudent person" authority of the governing statutes and in accordance with the policies set by the Board of Trustees, the System lends its securities to broker-dealers and banks pursuant to a form of loan agreement. The system's custodial bank is authorized to lend available securities to approved broker-dealers and banks subject to lend available securities to approved broker-dealers and banks subject to the receipt of acceptable collateral.

During the fiscal year, the System lent securities and received cash, securities insured or guaranteed by the US government or its agencies, and irrevocable bank letters of credit as collateral. The System did not have the ability to pledge or sell collateral securities absent a borrower default. Borrowers were required to deliver collateral for each

loan equal to: (1) in the case of loaned securities denominated in dollars or whose primary trading market was located in the United States, 102% of the market value of the loaned securities; and (2) in the case of loaned securities not denominated in US dollars or whose primary trading market was not located in the United States, 105% of the market value of the loaned securities.

The System did not impose any restrictions during the fiscal year on the amount of the loans that the custodial bank made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the year. There were no losses during the year resulting from a default of the borrowers or the custodial bank.

The System and borrowers maintained the right to terminate all securities lending transactions on demand. The average duration of cash collateral in a collective investment pool was unavailable as of the report date. Because the loans were terminable at will, their duration did not match the duration of the investments made with the cash collateral. On June 30, 1998, the System had no credit risk exposure to borrowers.

The collateral held and the market value of securities on loan for the System were unavailable as of the report date.

At June 30, 1998, and 1997, the System earned \$80,272 and \$50,402 respectively on the securities lending program.

## **9. SUMMARY OF VALUATION RESULTS:**

The 1997 actuarial valuation reflects the provisions of House Bill 356 effective August 28, 1997. The amended provisions are as follows:

- \* For current active and inactive employees, annual COLA's continue at 80% of the change in the CPI, limited to the 4%-5% range. After the 65% cap, COLA's will be 80% of the change in the CPI limited to a range of 0%-5%.
- \* For employees hired after August 28, 1997, the COLA will be 80% of the change in the CPI, with a range of 0%-5%.

# Highway and Transportation Employees' and Highway Patrol Retirement System

GASB Number 25 as of July 1, 1998  
Schedule of Funding Progress (1)

## Exhibit I

Date of Valuation	Actuarial Asset Value	Entry Age Normal Accrued Liability	Unfunded Accrued Liability (UAL)	Funded Ratio	Covered Payroll	UAL as a Percentage of Covered Payroll
07/01/91	\$560,976,822	\$ 841,195,967	\$ 280,219,145	66.69%	\$220,856,988 (2)	126.88%
07/01/92	622,018,133	904,097,721	282,079,588	68.80%	220,919,382	127.68%
07/01/93	688,963,225	1,000,704,491	311,741,266	68.85%	228,032,159	136.71%
07/01/94	746,946,221	1,204,313,635	457,367,414	62.02%	236,748,214	193.19%
07/01/95	831,031,253	1,330,909,279	499,878,026	62.44%	243,561,510	205.24%
07/01/96	916,553,828	1,429,910,844	513,357,016	64.10%	254,712,739	201.54%
07/01/97	1,015,906,708	1,651,811,690	635,904,982	61.50%	271,070,643	234.59%
07/01/98	1,126,961,804	1,744,052,411	617,090,607	64.62%	278,690,426	221.43%

(1) Since the Long-Term Disability (LTD) Plan uses the aggregate funding method, this schedule is not required for the LTD Plan and the assets and liabilities have been excluded.

(2) Estimated as July 1, 1990, through June 30, 1991, valuation payroll.



**HIGHWAY AND TRANSPORTATION EMPLOYEES' AND HIGHWAY PATROL RETIREMENT SYSTEM**  
**GASB Number 25 and 27 as of July 1, 1998**  
**Schedule of Employer Contributions and Development of Net Pension Obligation (1)**

**Exhibit II - Uniform**

Fiscal Year Ending	Covered Payroll	Actual Employer Contributions	Actual Employer Contribution %	Annual Required Contribution (ARC)%	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
06/30/91	\$30,189,436 (2)	\$10,545,170	34.93%	34.93%	\$10,545,170	100.00%	0
06/30/92	30,606,601	11,101,014	36.27%	36.27%	11,101,014	100.00%	0
06/30/93	31,004,803	9,868,829	31.83%	31.83%	9,868,829	100.00%	0
06/30/94	32,715,429	9,739,383	29.77%	29.77%	9,739,383	100.00%	0
06/30/95	35,232,287	14,462,854	41.05%	41.05%	14,462,854	100.00%	0
06/30/96	39,557,621	15,743,114	39.17%	(3) 39.17%	15,743,114	100.00%	0
06/30/97	42,242,106	16,546,233	39.17%	39.17%	16,546,233	100.00%	0
06/30/98	43,987,039	16,600,708	37.74%	37.74%	16,600,708	100.00%	0

(1) Contributions for the Long-Term Disability Plan are de minimus and are excluded from this schedule.

(2) Estimated as July 1, 1990, through June 30, 1991, valuation payroll.

(3) 41.05% July 1, 1995, through October 31, 1995, and 39.17% November 1, 1995, through June 30, 1996.

**Exhibit III - Non-Uniform**

Fiscal Year Ending	Covered Payroll	Actual Employer Contributions	Actual Employer Contribution %	Annual Required Contribution (ARC)%	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
06/30/91	\$190,667,552 (2)	\$35,864,567	18.81%	18.81%	\$35,864,567	100.00%	0
06/30/92	190,312,781	37,929,337	19.93%	19.93%	37,929,337	100.00%	0
06/30/93	197,027,356	41,454,556	21.04%	21.04%	41,454,556	100.00%	0
06/30/94	204,032,785	40,949,380	20.07%	20.07%	40,949,380	100.00%	0
06/30/95	208,329,222	56,144,725	26.95%	26.95%	56,144,725	100.00%	0
06/30/96	215,155,118	56,842,321	26.15%	(3) 26.15%	56,842,321	100.00%	0
06/30/97	228,828,537	59,838,662	26.15%	26.15%	59,838,662	100.00%	0
06/30/98	234,703,387	61,140,232	26.05%	26.05%	61,140,232	100.00%	0

(1) Contributions for the Long-Term Disability Plan are de minimus and are excluded from this schedule.

(2) Estimated as July 1, 1990, through June 30, 1991, valuation payroll.

(3) 26.95% July 1, 1995, through October 31, 1995, and 26.15% November 1, 1995, through June 30, 1996.

**NOTES TO THE SCHEDULES OF TREND INFORMATION**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date ..... June 30, 1998  
 Actuarial Cost Method ..... Entry Age Normal  
 Amortization Method Level Dollar, Closed ..... Level Dollar, Closed  
 Remaining Amortization Period ..... 36 Years  
 Asset Valuation Method ..... 5-Year Adjusted Value Average

**Actuarial Assumptions:**

Investment Rate of Return ..... 8.25%  
 Projected Salary Increases\* ..... 4.5 to 9.0%  
 \*Includes Inflation at ..... 4.0%

## Schedule of Administrative Expenses (Unaudited)

	<u>1998</u>	<u>1997</u>
<b><u>Personal Services:</u></b>		
Salary expense	\$ 107,416	\$ 92,538
Employee benefit expense	<u>34,872</u>	<u>23,339</u>
<b>Total Personal Services</b>	<u>142,288</u>	115,877
<b><u>Professional Services:</u></b>		
Actuary fee	72,528	60,575
Audit expense	<u>7,500</u>	<u>7,800</u>
<b>Total Professional Services</b>	80,028	68,375
<b><u>Miscellaneous:</u></b>		
Agency expense	311,268	230,451
Depreciation	9,253	13,155
Travel expense	17,879	7,541
Office supplies	16,294	6,608
Postage	31,798	24,734
Insurance premium	343	343
Bank service charge	4,885	4,668
Government Consultant Fees	12,000	n/a
Other	<u>5,619</u>	<u>19,925</u>
<b>Total Miscellaneous</b>	<u>409,339</u>	<u>307,425</u>
<b>Total Administrative Expenses</b>	<u>\$ 631,655</u>	<u>\$ 491,677</u>

## Schedule of Investment Expenses

<b><u>Investment Expenses:</u></b>		
Investment management fee	1,449,009	1,025,054
Monitoring fee	40,450	44,230
Investment expense	<u>314,317</u>	<u>301,329</u>
<b>Total Investment Expenses</b>	\$ 1,803,776	1,370,613

## Commissions and Payments to Brokers and Consultants

	Assets Under Management at 6/30/98 (At Cost—Cash Basis)	Fees Paid During FY '98
Investment Managers:		
United Missouri Bank of Kansas City, N.A.	\$1,019,262,707.00	\$1,212,036.00
Rothschild Asset Management	\$50,705,822.00	\$236,973.00
Investment Consultant: DeMarche Associates		\$40,450.00

<u>Investment Brokerage Firm</u>	<u>Shares</u>	<u>Commissions</u>	<u>Per Share</u>
Capital Institutional Services Inc.	576,818	\$19,056.18	\$0.03
Deutsche Bank Securities, Inc.	45,700	2,642.00	0.06
Boston Institutional Services Inc.	154,000	6,990.00	0.05
Paine Webber	153,950	8,717.50	0.06
Bear Stearns	210,791	10,689.88	0.05
Smith Barney Inc.	20,200	1,212.00	0.06
Donaldson, Lufkin & Jenrette Securities	225,300	12,527.00	0.06
Prudential Securities Incorporated	169,700	9,482.00	0.06
Morgan Stanley & Company Incorporated	123,881	7,032.86	0.06
Frank Russell Sec/Broadcort CAP CLEA	113,000	5,890.00	0.05
Standard & Poors Securities Inc.	239,925	10,770.25	0.04
Oppenheimer and Company Inc.	55,200	2,962.00	0.05
Conning & Co/BCC CLRG	123,750	6,287.50	0.05
Brown Brothers Harriman & Company	106,100	5,436.00	0.05
DB Clearing	35,900	1,795.00	0.05
Warburg Dillion Read LLC	68,000	3,400.00	0.05
Baum, George K & Co.	35,000	1,050.00	0.03
Oneil (William) & Co.	70,000	4,100.00	0.06
Merrill Lynch, Pierce, Fenner & Smith	136,100	8,166.00	0.06
Edwards, A.G., & Sons Inc.	10,000	600.00	0.06
Goldman, Sachs & Company	37,300	2,238.00	0.06
ABN Amro Chicago Corp.	30,800	1,738.00	0.06
Cowen & Co.	95,900	5,754.00	0.06
Stifel, Nicolaus & Company Inc.	37,000	2,220.00	0.06
Berean Capital Inc. #2	33,000	1,680.00	0.05
Correspondent Services Corporation	11,800	590.00	0.05
Keefe Bruyette and Woods Inc.	106,000	6,360.00	0.06
Weeden & Co.	21,500	1,225.00	0.06
Pryor McLendon	123,000	5,100.00	0.04
Piper Jaffray Inc.	36,400	2,184.00	0.06
McDonald & Company Securities, Inc.	82,500	4,950.00	0.06

continued on next page

**Continued**

<u>Investment Brokerage Firm</u>	<u>Shares</u>	<u>Commissions</u>	<u>Per Share</u>
Paragon Financial Corp.	155,750	5,522.50	0.04
Raymond James & Assoc. Inc.	92,500	4,950.00	0.05
Broadcort Cap Corp./Sub of MLPF & S	48,500	2,460.00	0.05
Everen Clearing Corp.	266,320	8,669.60	0.03
First Southwest Company	71,400	3,720.00	0.05
Kirkpatrick Pettis Smith	20,000	1,100.00	0.06
Direct	8,600	516.00	0.06
Bernstein, Sanford C & Co, Inc.	71,900	4,314.00	0.06
Jefferies & Company	146,000	7,300.00	0.05
Weiss Peck & Greer LLC	37,000	1,850.00	0.05
Lehman Brothers Inc.	27,200	1,632.00	0.06
Ingalls & Snyder	28,800	1,728.00	0.06
Wheat First Securities	113,500	6,810.00	0.06
Dain Rauscher Inc.	5,800	348.00	0.06
Davidson DA & Company Inc.	4,300	258.00	0.06
Janney Montgomery Scott Inc.	148,100	8,886.00	0.06
UBS Securities Inc.	1,300	78.00	0.06
Baird, Robert W. & Company Incorpor	96,700	5,802.00	0.06
BT Alex, Brown Inc.	107,300	6,438.00	0.06
Cantor Fitzgerald & Co.	77,700	3,885.00	0.05
CL King & Associates Inc.	59,600	3,576.00	0.06
Bradford, JC & Company	200	12.00	0.06
Nationsbanc Montgomery Sec LLC/SF	35,600	2,136.00	0.06
Morgan Keegan & Company Inc.	62,200	3,732.00	0.06
Fox-Pitt Kelton Inc.	16,900	1,014.00	0.06
Factset Data Systems (thru Bear Stearn)	30,750	1,537.50	0.05
Hoenig & Co. Inc.	35,700	1,785.00	0.05
Instinet	39,200	1,960.00	0.05
Maxus Corp	81,300	4,878.00	0.06
Robinson Humphrey	58,700	2,935.00	0.05
Furman Selz LLC	190,800	11,448.00	0.06
Lynch Jones & Ryan Inc.	189,400	9,470.00	0.05
Chapman Company	24,800	1,200.00	0.05
Sherwood Securities/Broadcort Cap CL	7,200	432.00	0.06
Lew Co. Securities Agent/Schroder Wert	82,900	4,868.00	0.06
Tucker Anthony & RL Day Inc.	19,100	1,146.00	0.06
Legg Mason Wood Walker Inc.	95,100	5,706.00	0.06
ISI Group Inc.	7,400	444.00	0.06
Dain Bosworth Inc.	43,600	2,616.00	0.06
I/B/E/S Inc.	16,300	815.00	0.05
Jackson Partners & Associates Inc.	48,000	1,920.00	0.04
<b>Total Brokerage Fees</b>	<b><u>5,961,935</u></b>	<b><u>\$302,742.77</u></b>	<b><u>\$0.05</u></b>

**Financial Section**

Highway & Transportation Employees'  
and Highway Patrol Retirement System

# INVESTMENT SUMMARY

	6/30/97			Sales &	6/30/98		% of	Projected	Projected
	Book Value	Market Value	Purchased	Redemptions	Book Value	Market Value	Total Market	Income	Yield
<b>Fixed Income</b>									
<b>Bonds</b>									
Government	223,375,977	224,697,979	70,718,859	45,204,188	248,890,770	253,027,306	19.3	16,441,328	6.5
Corporate									
Financial	3,594,862	3,655,583	0	3,594,862	0	0	0.0	0	0.0
Industrial	85,686,011	85,333,250	11,229,648	7,041,568	89,874,093	92,528,034	7.1	5,903,108	6.4
Utilities	82,978,412	82,515,400	3,777,263	6,387,835	80,367,841	82,404,108	6.3	5,099,538	6.2
Convertible	5,590,483	5,178,955	0	2,172,978	3,417,507	3,112,500	0.2	115,000	3.7
Total Bonds	401,225,745	401,381,167	85,725,770	64,401,431	422,550,211	431,071,948	32.9	27,558,974	6.4
Preferred Stock	0	0	0	0	0	0	0.0	0	0.0
Total Fixed Income	401,225,745	401,381,167	85,725,770	64,401,431	422,550,211	431,071,948	32.9	27,558,974	6.4
<b>Common Stock</b>									
Financial & Utility	86,702,653	108,138,704	19,205,599	12,280,374	93,627,877	145,786,786	11.1	4,703,715	3.2
Basic Industry	103,437,761	141,541,946	29,913,293	16,710,017	116,640,982	147,341,259	11.3	3,509,274	2.4
Consumer & Service	212,339,142	291,120,495	90,513,581	30,885,481	271,970,750	389,380,628	29.8	6,074,928	1.6
Technology	35,760,925	48,942,811	14,896,927	8,726,717	41,927,800	70,609,131	5.4	471,499	0.7
Total Common Stock	438,240,481	589,743,956	154,529,400	68,602,589	524,167,409	753,117,804	57.6	14,759,416	2.0
<b>Short Term</b>									
Comm. Paper & STIF	82,224,937	82,404,039	885,831,867	886,634,674	81,422,167	81,612,005	6.2	4,596,383	5.6
Government	48,751,054	49,492,234	18,219,017	38,775,281	28,194,668	28,453,868	2.2	1,650,596	5.8
Corporate	25,893,170	26,064,981	13,382,697	24,838,032	14,437,835	14,513,525	1.1	941,070	6.5
Cash	11,400	11,400	0	0	0	0	0.0	0	0.0
Total Short Term	156,880,561	157,972,654	917,433,581	950,247,987	124,054,670	124,579,398	9.5	7,188,049	0.0
Total Investments	996,346,787	1,149,097,777	1,157,688,751	1,083,252,007	1,070,772,290	1,308,769,150	100.0	49,506,439	3.8

This Schedule uses book and market values as shown on the financial statement.

Short term purchases are increased by the amount bonds becoming less than 1 year; sales represent sales of bonds due in 1 year.

Similar adjustments have been made to the respective Bond categories.

Note-Ascent Entertainment (Cons & Serv- \$306,273.19 book) was spun off Comsat (Fin & Util) June 1997, BV adj July 1997. Mallinkrodt (\$6,600,000) from Basic to Cons & Serv. Crescendo Pharm (Cons & Serv- \$100,625) was spun off Alza as a dividend (treated as pur). Ahold (Cons & Serv) inc BV \$4,264.41 as a div. Raytheon (Technology \$147,822) was spun off General M associates Corp (Financial \$318,987) was spun off Ford (Cons & Serv \$318,987)

# Missouri State Highway Patrol



**Captain Terry W. Moore**  
Director,  
Human Resources Division



**Theresa M. Backes**  
Special Assistant



**Kerry Bax**  
Personnel Records  
Clerk III



**Bev Mauzy**  
Personnel Records  
Clerk III

## Missouri Department of Transportation



**Joyce Wagner**  
Senior Benefits Specialist



**Mary Helen Norfleet**  
Senior Benefits Specialist



**Patti Holzem**  
Senior Clerk

These employees of the Missouri Department of Transportation and Highway Patrol work daily to maintain current records of prior service credit, purchase of military service credit and employee records for members of the system. This group works closely with the Executive Director to analyze and evaluate questions regarding prior service or disability.



**MILLIMAN & ROBERTSON, INC.**

Actuaries and Consultants

Saint Louis Place, Suite 1700, 200 North Broadway, St. Louis, Missouri 63102-2756

Telephone: 314/231-3031

Fax: 314/231-0249

December 9, 1998

Mr. Norm Robinson, Executive Director  
Missouri Highway and Transportation Employees'  
and Highway Patrol Retirement System  
P. O. Box 104660  
Jefferson City, MO 65110

Dear Mr. Robinson:

We have completed the July 1, 1998, annual actuarial valuation of the Highway and Transportation Employees' and Highway Patrol Retirement System. Separate valuations were performed and reports issued for LTD benefits and all other benefits provided by the System. The System's funding objective is to contribute the full cost of future benefits through contributions as a level percentage of future covered payroll, plus the amortization of unfunded accrued liabilities over a period of thirty-nine years from July 1, 1997. Increases and decreases to the unfunded entry age accrued liabilities due to plan amendments are amortized over thirty-nine years from the effective date of the plan amendment. Effective July 1, 1997, the amortization period will decrease by one each year until it reaches 30 years on July 1, 2006. The System has been making the necessary contributions as determined by the actuarial valuations.

There are two types of benefits provided by the System; those required to be funded in advance, and those which can be funded on a pay-as-you go basis. The advance funded benefits represent the major portion of the benefits to be provided by the System. Recommended contribution rates as a percentage of covered payroll were developed in the July 1, 1998, actuarial valuation for the total benefits to be provided and separated for those required to be funded in advance. The recommended rates are shown below:

**Recommended Contribution Rates as a Percentage of Covered Payroll**

	<u>Total System Benefits</u>	<u>Benefits Funded in Advance by Statute</u>
Non-Uniformed	22.00%	19.43%
Uniformed Patrol	30.44%	26.87%

These contribution rates exclude the recommended contribution for LTD benefits, which is 0.08% of covered payroll for both non-uniformed and uniformed patrol employees. The rates are effective for the fiscal year beginning July 1, 1999.

Actuarial valuations are performed as of July 1st each year. The assumptions as to future experience and actuarial cost methods were adopted by the Board effective July 1, 1995, based on the System's experience for the period from July 1, 1989, through June 30, 1994. Periodically an experience study is performed to determine the appropriate actuarial assumptions.

The funded status of the plan as measured by the ratio of the actuarial asset value to the entry age normal accrued liability is shown below (Non-Uniformed and Uniformed Patrol combined):

Entry Age Normal Accrued Liability	\$1,744,052,411
Actuarial Asset Value	1,126,961,804
Funded Ratio	64.62%

The value of plan assets for use in determining the funded ratio and the contribution rates is the five-year average of adjusted market values as described in IRS Regulations Section 1.412(c)(2)-1(b)(7)-(8).

Additional financial data submitted to the System's accountant under GASB No. 25 and 27 is shown in the attached Exhibits I-III.

The results of the July 1, 1998, actuarial valuations are presented in the Annual Actuarial Valuation Reports. Approval of the contribution rates recommended in the report will adequately provide for the benefits accruing under the System.

The information and valuation results shown in the Annual Actuarial Valuation Reports are, to the best of my knowledge, complete and accurate and are based upon:

1. Employee census data submitted by the Highway and Transportation Commission. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.
2. Financial data submitted by the Highway and Transportation Commission. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.
3. Actuarial assumptions which, in the aggregate, are reasonably related to the experience of the plan and to reasonable expectations, and which represent our best estimate of anticipated experience under the plan.
4. Actuarial methods as stated in the reports and our interpretation of the plan provisions as summarized in the report.

Sincerely,



John L. Molinar, F.S.A.  
Consulting Actuary



# Summary of Actuarial Methods and Assumptions

## METHODS

### Asset Valuation Method

Valuation assets were determined using the five-year adjusted value average method described in IRS Regulations Section 1.412(c)(2)-1(b)(7)-(8).

### Actuarial Cost Method

The Entry Age Normal cost method on a closed group basis was used. Normal costs were computed as a level percentage of pay. Unfunded entry age accrued liabilities are amortized over 39 years from July 1, 1997, as a level percent of covered payroll. For this purpose, covered payroll is assumed to increase 4% per year. Increases and decreases to the unfunded entry age accrued liabilities due to plan amendments are amortized over 39 years from the effective date of the plan amendments. Effective July 1, 1997, the amortization period will decrease by one each year until it reaches 30 years on July 1, 2006.

## ASSUMPTIONS

<u>Interest Rate:</u>	8.25% per annum, net of investment management fees.
<u>Operating Expenses:</u>	0.80% of the anticipated employer contribution.
<u>Surviving Spouses:</u>	90% of employees dying in-service will have an eligible beneficiary the same age.
<u>Post-Retirement Benefit Increases:</u>	The annual Consumer Price Index is assumed to be 4.0%.
<u>Applicable Disability Benefit:</u>	All future disabilities are assumed covered by LTD benefits.
<u>Offsets to LTD Benefits:</u>	It was assumed Workers Compensation Indemnity Benefits would be zero and that Social Security Disability PIA benefits would always apply.
<u>Mortality:</u>	Rates for non-disabled employees and pensioners are based upon the Unisex Pension 1984 Mortality Table.

### Salary Increase Assumptions:

#### Annual Rate of Increase NON-UNIFORMED AND UNIFORMED PATROL

<u>Age</u>	<u>Percent</u>	<u>Age</u>	<u>Percent</u>	<u>Age</u>	<u>Percent</u>	<u>Age</u>	<u>Percent</u>
15-20	9.00	31	6.60	41	5.11	51	4.54
21	8.80	32	6.45	42	5.02	52	4.53
22	8.60	33	6.30	43	4.93	53	4.52
23	8.40	34	6.15	44	4.84	54	4.51
24	8.20	35	6.00	45	4.75	55-60	4.50
25	8.00	36	5.84	46	4.71	61	4.70
26	7.75	37	5.68	47	4.67	62	4.90
27	7.50	38	5.52	48	4.63	63	5.10
28	7.25	39	5.36	49	4.59	64	5.30
29	7.00	40	5.20	50	4.55	65-70	5.50
30	6.75						

**Severance Assumptions:****Annual Terminations Per 100 Employees  
(Sample)****Years of Service**

<u>Sample Age</u>	<u>0</u>	<u>1</u>	<u>2-4</u>	<u>5-9</u>	<u>10+</u>
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**NON-UNIFORMED MALES**

15	25	12.5	7.7	3.0	1.1
25	25	10.7	6.0	2.7	1.1
35	25	8.3	4.8	2.1	0.7
45	25	7.1	4.8	1.5	0.3
50-60	25	6.0	4.8	1.5	0.3

**NON-UNIFORMED FEMALES**

15	17.5	12.6	9.5	7.6	3.4
25	17.5	9.5	9.5	7.6	3.4
35	17.5	9.5	8.2	3.8	2.3
45-60	17.5	9.5	3.2	2.5	0.7

**UNIFORMED PATROL**

15	10.5	2.5	2.5	2.1	2.2
25	17.5	2.1	2.1	2.1	2.2
35	24.5	2.1	2.1	2.1	2.2
40-60	24.5	2.1	2.1	2.1	0.5

**Retirement Assumptions:****Eligible Active Members  
Retiring Within Next Year**

<u>Retirement Age</u>	<u>Age Retirement</u>			<u>Disability Retirement</u>		
	<u>NON-UNIFORMED</u>	<u>UNIFORMED</u>		<u>NON-UNIFORMED</u>	<u>UNIFORMED</u>	
	<u>Male</u>	<u>Female</u>	<u>Patrol</u>	<u>Male</u>	<u>Female</u>	<u>Patrol</u>
50	2.5%	1.0%	3.0%	0.6%	0.5%	0.3%
51	2.5	1.0	3.0	0.7	0.6	0.3
52	2.5	1.0	3.0	0.8	0.7	0.3
53	2.5	1.0	3.0	0.9	0.8	0.4
54	2.5	1.0	3.0	1.0	1.0	0.4
55	15.0	8.0	40.0	1.1	0.6	0
56	10.0	8.0	25.0	1.1	0.8	0
57	10.0	8.0	40.0	1.1	1.0	0
58	10.0	8.0	50.0	1.1	1.2	0
59	10.0	8.0	60.0	1.1	1.4	0
60	15.0	20.0	100.0			
61	25.0	20.0				
62	50.0	50.0				
63	30.0	15.0				
64	40.0	15.0				
65	65.0	60.0				
66	60.0	30.0				
67	10.0	30.0				
68	10.0	30.0				
69	50.0	30.0				
70	100.0	100.0				

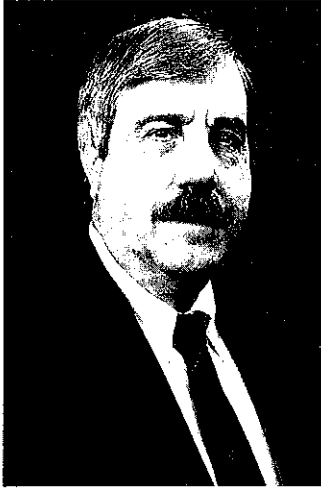
# Schedule of Recommended Contributions

<u>Fiscal Year</u>	<b>TOTAL SYSTEM BENEFITS</b>	
	<u>Recommended Contributions as a Percentage of Payroll</u> <u>Non-Uniformed</u>	<u>Uniformed Patrol</u>
1989	19.85	38.11
1990	19.85	38.11
1991	19.04	35.16
1992	20.16	36.50
1993	21.24	32.03
1994	20.27	29.97
1995	27.24	41.34
1996	26.22	39.24
1997	26.12	37.81
1998	22.60	31.76

NOTE: Actual contribution never less than recommended.

## Schedule of Active Member Valuation Data

<u>Actuarial Valuation</u> <u>Date</u>	<u>Number</u>	<u>Covered</u> <u>Payroll</u>	<u>Average</u> <u>Pay</u>	<u>% Change</u> <u>in Average Pay</u> <u>from Prior Year</u>
07/01/89	8,181	194,452,400	23,769	(0.5)
07/01/90	8,256	211,414,753	25,607	7.7
07/01/91	8,308	220,856,988	26,584	3.8
07/01/92	8,591	228,503,592	26,598	0.05
07/01/93	8,658	236,236,082	27,285	2.58
07/01/94	8,849	242,864,780	27,445	0.59
07/01/95	8,904	250,529,253	28,137	2.52
07/01/96	9,023	264,196,115	29,280	4.06
07/01/97	8,997	280,209,116	31,145	6.37
07/01/98	8,871	284,889,796	32,115	3.11



**Alfred S. Kaiser**  
Business and Benefits Manager



**Robin McKee**  
Intermediate Business Specialist



**Maxine Johnson**  
Account Technician



**Donna Hoffman**  
Account Technician

The group handles the payroll and accounting operation of the retirement system in the Business and Benefits Support Division of the Missouri Department of Transportation. Robin McKee performs the accounting duties for the system, and Maxine Johnson and Donna Hoffman prepare and review the retirement payroll for accuracy and correctness.

# Investments

## Time Weighted Rates of Return Percentage

Fiscal Year Ended June 30, 1998

	<u>Long-Term Averages</u>		<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
	<u>5-Year</u>	<u>10-Year</u>					
<b><u>Total Fund</u></b>	<b><u>11.28</u></b>	<b><u>11.36</u></b>	<b><u>3.31</u></b>	<b><u>14.32</u></b>	<b><u>10.44</u></b>	<b><u>15.06</u></b>	<b><u>14.07</u></b>
Equities	15.21	17.16	6.70	20.05	16.91	22.97	19.80
Fixed Income	8.33	6.37	0.62	10.28	5.09	7.58	8.51
Short Term	6.06	6.12	3.19	5.01	5.81	5.51	5.62
MO/Small Business	1.17	-4.43	2.71	1.66	-44.48	0.01	26.02

## Largest Investment Holdings

Fiscal Years Ended June 30, 1998

### **LARGEST EQUITY SECURITIES**

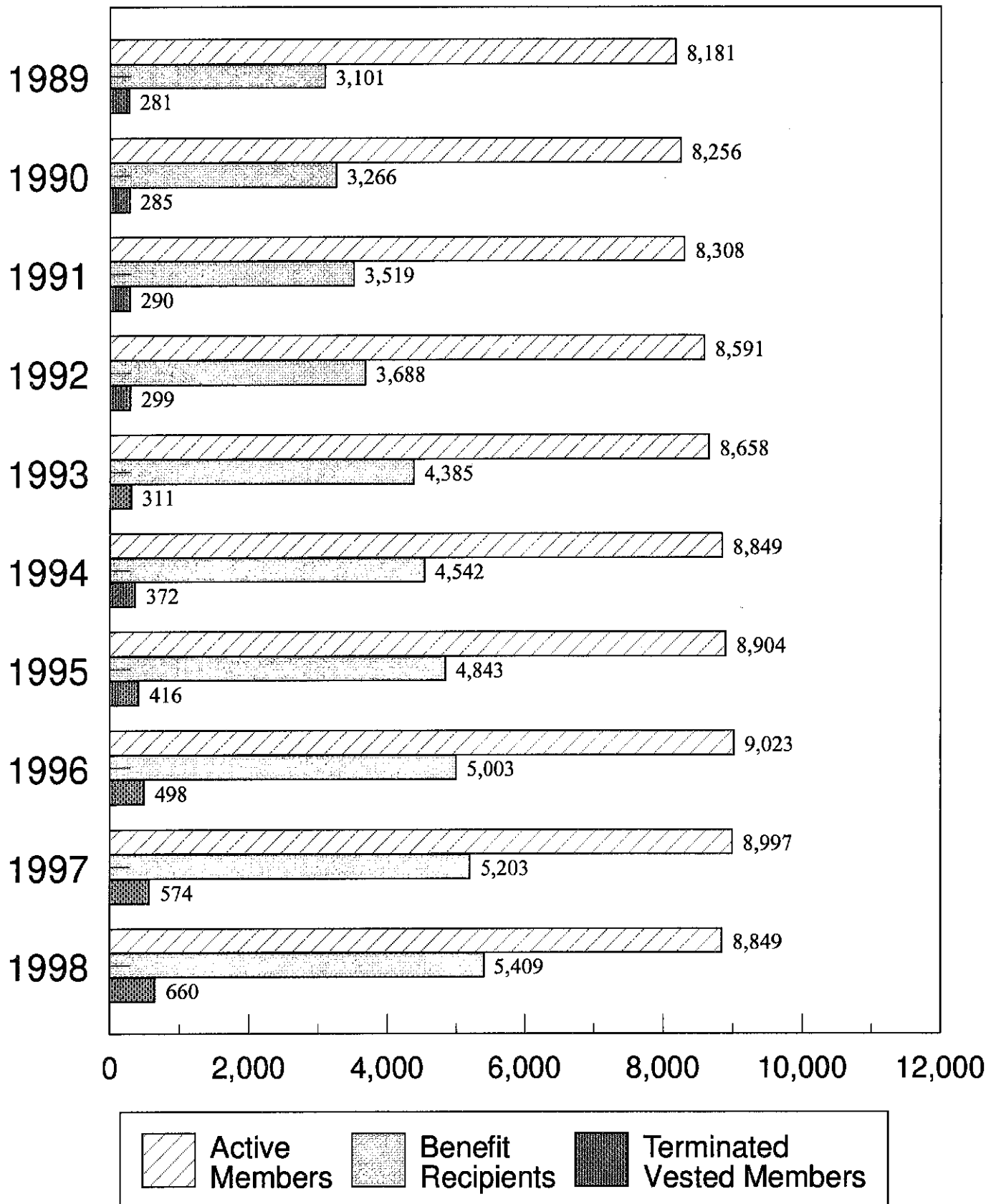
<u>Shares</u>	<u>Security</u>	<u>Market Value</u>
274,725	Williams Companies Inc.	\$9,271,969
76,000	International Business Machines Corp.	8,725,788
200,000	SBC Communications Inc.	8,000,000
60,000	Bristol Myers Squibb Co.	6,896,280
50,000	Merck & Co Inc.	6,687,500
315,000	Bob Evans Farms Inc.	6,674,220
150,000	Dresser Industries Inc.	6,609,450
150,000	Alza Corp.	6,487,500
185,000	USX Marathon Group	6,347,905
142,000	Halliburton Co.	6,310,196

### **LARGEST FIXED INCOME SECURITIES**

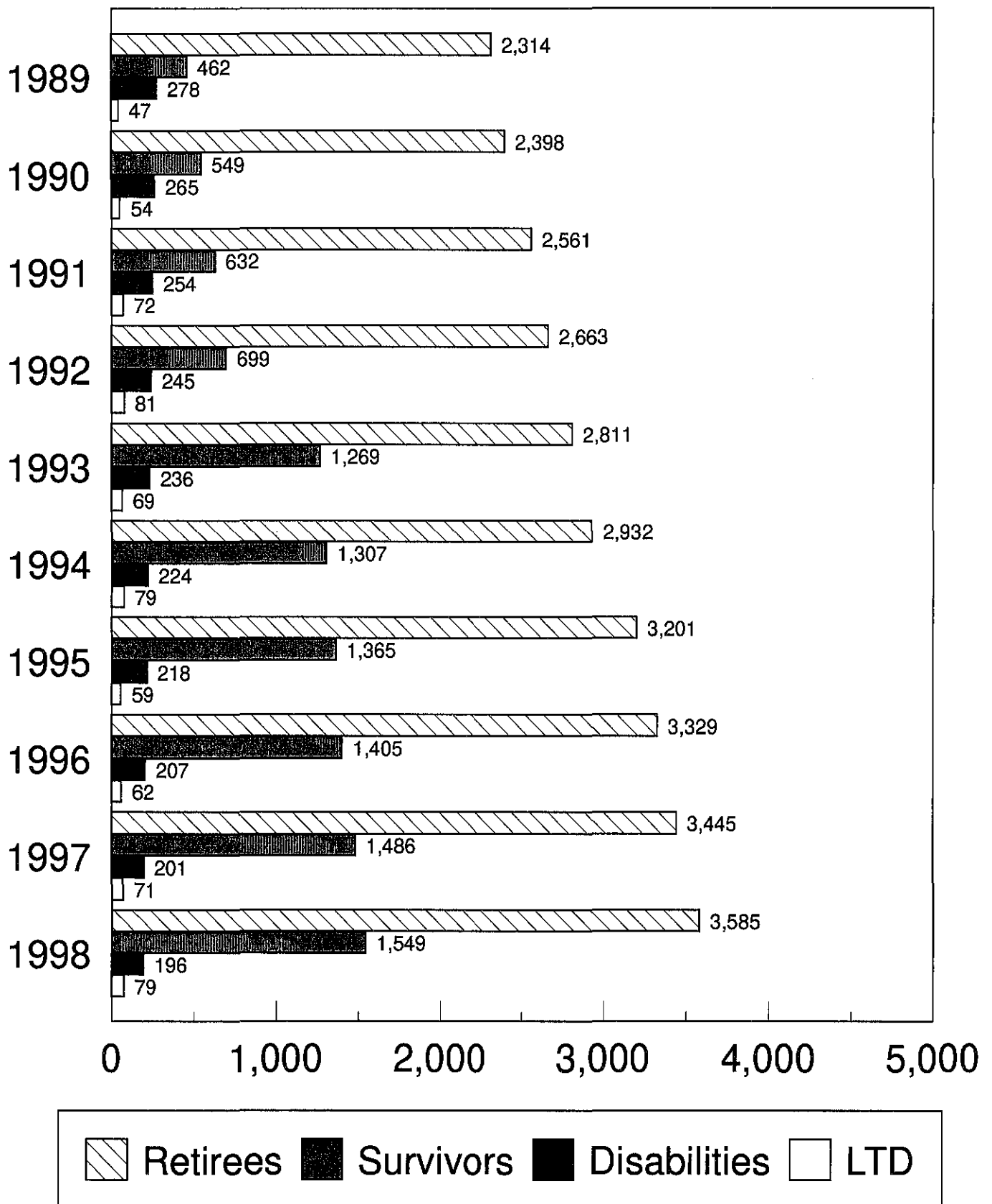
<u>Par</u>	<u>Security</u>	<u>Market Value</u>
6,000,000	Israel State, 6.60%, Due 2-15-2008	\$6,393,600
5,000,000	Federal National Mortgage Assn., 6.10%, Due 2-10-2000	5,034,400
5,000,000	Federal National Mortgage Assn., 6.10%, Due 1-26-2005/01 @ 100	5,012,500
5,000,000	Federal Home Loan Bank, 7.125%, Due 2-2-2016	5,009,400
5,000,000	Monongahela Power Company, 5.625%, Due 4-1-2000	4,987,000
5,000,000	Federal National Mortgage Assn., 5.50%, Due 2-2-2001	4,977,000
4,500,000	Federal National Mortgage Assn., 6.41%, Due 3-8-2006	4,662,000
4,500,000	Federal National Mortgage Assn., 6.41%, Due 2-6-2002	4,606,650
4,500,000	Florida Power and Light, 5.50%, Due 7-1-1999	4,487,400
4,500,000	Federal National Mortgage Assn., 5.55%, Due 1-17-2000	4,486,050

Space and cost restrictions make it impractical to print the entire investment portfolio in this report. However, a portfolio listing is available for review in the office of the Executive Director of the Highway and Transportation Employees' and Highway Patrol Retirement System or the listing will be mailed upon request.

# Membership Distribution



# Benefit Recipients



# Active Members

## BY AGE

<u>Age</u>	<u>Total</u>	<u>Department of Transportation</u>	<u>Civilian Patrol</u>	<u>Uniformed Patrol</u>	<u>Retirement System</u>
<21	40	34	6	-	-
21-25	468	314	58	96	-
26-30	1,132	723	108	300	1
31-35	1,280	925	145	210	-
36-40	1,462	1,157	173	132	-
41-45	1,378	1,051	187	139	1
46-50	1,299	984	190	125	-
51-55	986	772	124	89	1
56-60	630	527	81	22	-
61-65	150	127	23	-	-
65+	24	19	4	-	1
<b>Total</b>	<b>8,849</b>	<b>6,633</b>	<b>1,099</b>	<b>1,113</b>	<b>4</b>
<b>Average Age</b>		<b>42</b>	<b>42</b>	<b>36</b>	<b>48</b>

## BY YEARS OF SERVICE

<u>Years of Service</u>	<u>Total</u>	<u>Department of Transportation</u>	<u>Civilian Patrol</u>	<u>Uniformed Patrol</u>	<u>Retirement System</u>
< 1	712	586	84	41	1
1-5	2,191	1,473	301	417	-
6-10	1,498	1,167	172	158	1
11-15	1,388	1,088	158	142	-
16-20	892	665	116	110	1
21-25	831	613	121	97	-
26-30	695	523	83	89	-
31-35	427	321	49	56	1
36-40	179	163	13	3	-
41-45	35	33	2	-	-
45+	1	1	-	-	-
<b>Total</b>	<b>8,849</b>	<b>6,633</b>	<b>1,099</b>	<b>1,113</b>	<b>4</b>
<b>Average Service</b>		<b>13</b>	<b>12</b>	<b>12</b>	<b>14</b>



# Terminated Vested Members

## BY AGE

<u>Age</u>	<u>Total</u>	<u>Department of Transportation</u>	<u>Civilian Patrol</u>	<u>Uniformed Patrol</u>
<21	-	-	-	-
21-25	-	-	-	-
26-30	29	23	4	2
31-35	106	85	13	8
36-40	135	113	14	8
41-45	106	75	20	11
46-50	137	96	24	17
51-55	105	79	14	12
56-60	37	32	5	-
61-65	5	3	2	-
65+	-	-	-	-
<b>Total</b>	<b>660</b>	<b>506</b>	<b>96</b>	<b>58</b>
<b>Average Age</b>		<b>43</b>	<b>44</b>	<b>44</b>

## BY YEARS OF SERVICE

<u>Years of Service</u>	<u>Total</u>	<u>Department of Transportation</u>	<u>Civilian Patrol</u>	<u>Uniformed Patrol</u>
<1	1	1	-	-
1-5	94	75	15	4
6-10	244	192	33	19
11-15	191	138	30	23
16-20	98	75	16	7
21-25	29	22	2	5
26-30	3	3	-	-
31-35	-	-	-	-
<b>Total</b>	<b>660</b>	<b>506</b>	<b>96</b>	<b>58</b>
<b>Average Service</b>		<b>11</b>	<b>11</b>	<b>12</b>

# Benefit Recipients By Type of Benefit

## ALL MEMBERS

Amount of Monthly Benefit	Type of Benefit					Total Recipients
	Retirement		Disability		Survivor	
	Normal	Early	Normal	Long-Term		
1 - 200	11	15	14	6	478	524
201 - 400	70	64	35	30	401	600
401 - 600	229	47	57	19	230	582
601 - 800	299	38	23	8	147	515
801 - 1000	326	21	25	6	77	455
1001 - 1200	338	9	19	4	45	415
1201 - 1400	317	10	9	4	40	380
1401 - 1600	276	3	7	-	37	323
1601 - 1800	245	3	4	1	25	278
1801 - 2000	193	2	1	-	24	220
2001 - 2200	179	1	1	-	15	196
2201 - 2400	177	-	-	-	8	185
2401 - 2600	164	-	1	-	5	170
2601 - 2800	118	-	-	1	7	126
2801 - 3000	97	-	-	-	-	97
> 3000	333	-	-	-	10	343
TOTALS	3,372	213	196	79	1,549	5,409

## DEPARTMENT OF TRANSPORTATION

Amount of Monthly Benefit	Type of Benefit					Total Recipients
	Retirement		Disability		Survivor	
	Normal	Early	Normal	Long-Term		
1 - 200	10	13	13	4	458	498
201 - 400	53	56	32	30	368	539
401 - 600	201	41	54	15	196	507
601 - 800	269	32	23	7	126	457
801 - 1000	296	19	22	6	52	395
1001 - 1200	303	8	19	4	35	369
1201 - 1400	282	10	6	4	31	333
1401 - 1600	233	3	6	-	22	264
1601 - 1800	217	3	3	1	18	242
1801 - 2000	172	2	1	-	17	192
2001 - 2200	158	1	-	-	12	171
2201 - 2400	149	-	-	-	5	154
2401 - 2600	130	-	-	-	3	133
2601 - 2800	81	-	-	-	7	88
2801 - 3000	49	-	-	-	-	49
> 3000	69	-	-	-	3	72
TOTALS	2,672	188	179	71	1,353	4,463

## CIVILIAN PATROL

Amount of Monthly Benefit	Type of Benefit					Total Recipients
	Retirement		Disability		Survivor	
	Normal	Early	Normal	Long-Term		
1 - 200	1	2	1	2	17	23
201 - 400	16	8	2	-	14	40
401 - 600	26	6	3	4	11	50
601 - 800	26	6	-	1	10	43
801 - 1000	30	2	3	-	13	48
1001 - 1200	29	1	-	-	3	33
1201 - 1400	30	-	2	-	1	33
1401 - 1600	38	-	1	-	1	40
1601 - 1800	24	-	-	-	-	24
1801 - 2000	15	-	-	-	1	16
2001 - 2200	9	-	-	-	-	9
2201 - 2400	6	-	-	-	1	7
2401 - 2600	4	-	-	-	-	4
2601 - 2800	4	-	-	1	-	5
2801 - 3000	7	-	-	-	-	7
> 3000	12	-	-	-	-	12
TOTALS	277	25	12	8	72	394

## UNIFORMED PATROL

Amount of Monthly Benefit	Type of Benefit					Total Recipients
	Retirement		Disability		Survivor	
	Normal	Early	Normal	Long-Term		
1 - 200	-	-	-	-	3	3
201 - 400	1	-	1	-	19	21
401 - 600	2	-	-	-	23	25
601 - 800	4	-	-	-	11	15
801 - 1000	-	-	-	-	12	12
1001 - 1200	6	-	-	-	7	13
1201 - 1400	5	-	1	-	8	14
1401 - 1600	5	-	-	-	14	19
1601 - 1800	4	-	1	-	7	12
1801 - 2000	6	-	-	-	6	12
2001 - 2200	12	-	1	-	3	16
2201 - 2400	22	-	-	-	2	24
2401 - 2600	30	-	1	-	2	33
2601 - 2800	33	-	-	-	-	33
2801 - 3000	41	-	-	-	-	41
> 3000	252	-	-	-	7	259
TOTALS	423	-	5	-	124	552

# Average Monthly Retirement Benefit Payments

## BY YEARS OF SERVICE

Retired In Fiscal Year		0-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
<b>DEPARTMENT OF TRANSPORTATION</b>									
1994	Average Benefit	270	489	770	957	1,194	1,722	2,148	2,417
	Current Retirees	4	8	7	20	28	34	47	24
1995	Average Benefit	350	608	756	837	1,194	1,666	2,043	2,266
	Current Retirees	2	6	7	28	63	81	49	29
1996	Average Benefit	262	357	601	909	1,198	1,581	2,039	2,376
	Current Retirees	2	4	11	16	42	45	50	28
1997	Average Benefit	296	312	679	840	1,182	1,490	2,086	2,572
	Current Retirees	1	8	19	18	58	44	31	19
1998	Average Benefit	179	440	629	884	1,164	1,454	2,018	2,259
	Current Retirees	3	6	9	23	46	50	44	24
<b>CIVILIAN PATROL</b>									
1994	Average Benefit	259	501	-	973	1,500	1,789	2,161	-
	Current Retirees	1	4	-	4	4	3	4	-
1995	Average Benefit	235	464	387	681	1,191	1,751	1,589	1,838
	Current Retirees	2	2	3	4	7	11	1	2
1996	Average Benefit	316	-	627	847	1,156	1,467	1,734	-
	Current Retirees	2	-	3	7	6	5	2	-
1997	Average Benefit	242	411	535	948	1,365	1,448	1,898	1,546
	Current Retirees	3	2	4	1	4	7	7	1
1998	Average Benefit	-	475	506	838	1,148	1,620	1,860	2,764
	Current Retirees	-	3	4	1	7	7	4	3
<b>UNIFORMED PATROL</b>									
1994	Average Benefit	-	-	-	1,974	2,568	3,465	4,238	-
	Current Retirees	-	-	-	3	8	15	3	-
1995	Average Benefit	-	-	-	646	2,661	3,028	3,936	-
	Current Retirees	-	-	-	1	21	38	8	-
1996	Average Benefit	-	-	-	-	2,381	3,119	3,779	-
	Current Retirees	-	-	-	-	9	11	3	-
1997	Average Benefit	-	-	-	327	2,676	3,157	3,677	-
	Current Retirees	-	-	-	1	10	22	1	-
1998	Average Benefit	-	-	-	2,688	2,789	3,179	3,980	-
	Current Retirees	-	-	-	1	16	14	2	-

Statistical Section

Highway & Transportation Employees' &  
Highway Patrol Retirement System

# Ten-Year Averages

## Retirement Age/Years Service/Benefit Information

(The information contained in this tabulation relates to current retirees who retired in the years indicated.)

Retired in Fiscal Year	Current Retirees	Average Age at Retirement	Average Service	Average Initial Benefit	Average Benefit on June 30, 1998	Percent of Increase
<b>DEPARTMENT OF TRANSPORTATION</b>						
1989	192	60.91	33.09	\$ 1,130.76	\$ 1,773.09	56.81
1990	120	60.52	31.49	1,009.69	1,512.69	49.82
1991	178	60.89	32.87	1,203.21	1,737.52	44.41
1992	130	60.26	33.09	1,217.95	1,677.20	37.71
1993	197	60.28	32.10	1,182.46	1,575.08	33.20
1994	172	60.42	31.75	1,278.17	1,630.87	27.59
1995	265	58.46	31.99	1,293.46	1,539.81	19.05
1996	198	59.26	32.41	1,437.71	1,573.80	9.47
1997	197	58.79	30.28	1,324.29	1,400.89	5.78
1998	205	59.52	31.68	1,431.05	1,456.78	1.80
<b>CIVILIAN PATROL</b>						
1989	26	61.31	30.38	\$ 951.47	\$ 1,494.81	57.11
1990	12	60.50	28.92	1,022.40	1,486.50	45.39
1991	23	62.39	26.91	799.44	1,164.56	45.67
1992	13	59.46	33.46	1,364.58	1,898.61	39.14
1993	19	60.68	28.05	988.03	1,307.11	32.29
1994	20	61.50	26.95	1,028.41	1,307.91	27.18
1995	32	59.09	27.09	976.84	1,191.89	22.01
1996	25	60.96	26.28	953.58	1,047.31	9.83
1997	29	60.34	28.07	1,139.47	1,191.28	4.55
1998	29	59.52	29.38	1,336.07	1,358.50	1.68
<b>UNIFORMED PATROL</b>						
1989	25	58.00	33.80	\$ 2,565.64	\$ 4,017.61	56.59
1990	19	57.42	33.74	2,439.69	3,657.64	49.92
1991	21	56.90	33.38	2,602.65	3,751.21	44.13
1992	22	56.23	32.32	2,439.28	3,388.93	38.93
1993	18	56.22	32.00	2,432.28	3,233.68	32.95
1994	29	56.21	31.41	2,474.01	3,141.12	26.96
1995	68	54.12	32.28	2,454.50	2,967.49	20.90
1996	23	54.39	32.39	2,645.61	2,916.44	10.24
1997	34	54.76	31.79	2,772.15	2,892.66	4.35
1998	33	53.82	31.15	2,945.87	3,023.62	2.64

NOTE: Annual cost-of-living adjustments range between 4% and 5%. The Benefit formula increases of 12.5% on August 13, 1988, and 6.7% effective January 1, 1995, were retroactive. To equitably implement enhanced survivor provisions effective October 1, 1989, benefits for members retiring prior to October 1, 1984, were recalculated based on current actuarial tables.

## NOTES

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